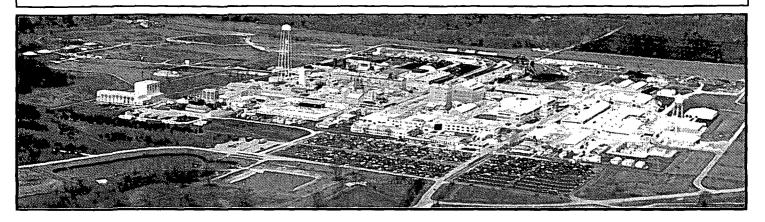
# FACT SHEET: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT FERNALD, OHIO

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DOE-FO/PUBLIC 4 FACT SHEET

## FACT SHEET: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

2378 Fernald, Ohio



### **Background**

The Fernald Environmental Management Project, formerly known as the Feed Materials Production Center, is located about 20 miles northwest of Cincinnati, Ohio. Uranium metal products for the nation's defense programs were produced at the facility between 1953 and 1989. During those years the facility produced slightly enriched or depleted uranium products for U.S. Department of Energy (DOE) sites in South Carolina, Tennessee, Colorado, and Washington. Much of the "feed material" produced at the Fernald Site was used in production reactors to make plutonium and tritium at other DOE sites. No explosive weaponry, devices, or highly radioactive materials have ever been produced or stored at the Fernald Site.

National Lead of Ohio was the managing contractor from 1951 to 1985. Westinghouse Environmental Management Company of Ohio, formerly Westinghouse Materials Company of Ohio, has been the managing contractor since January 1, 1986. Westinghouse employs approximately 1,200 workers, while Rust Engineering Co. and other subcontractors bring the total employment on site to approximately 1,400.

#### **New Mission**

Uranium metal production was suspended in July 1989 to focus the Fernald Site's resources on environmental restoration. Later that same year the site was added to the U.S. EPA's National Priority List of federal facilities in need of remediation. Since then, the workforce has been dedicated entirely to site restoration and efforts to meet the many federal and state regulatory requirements. This full-scale effort continues today, and environmental cleanup work is expected to last several years. The Department of Energy's Fernald Site Office staff manages all aspects of the environmental restoration and waste management effort. Commercial sources will be used to provide the depleted uranium products which historically were produced at the Fernald plant.

#### Fernald Site Vitals

Owner:

Managing Contractor:

managing contractor.

Historical Mission:

Current Mission:

Total Area of Site:

Area of Plant Proper: Original Cost:

Replacement Value: Number of Employees:

Payroll 1990: Annual Economic Impact: U.S. Department of Energy

Westinghouse Environmental Management Company of Ohio

Production of uranium metal forms (1953-1989)

Environmental Restoration

1,050 acres

136 acres \$118 million

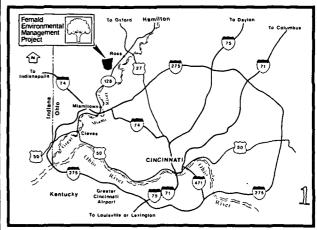
(buildings and equipment)

More than \$1 billion

Approximately 1,400

\$40 million

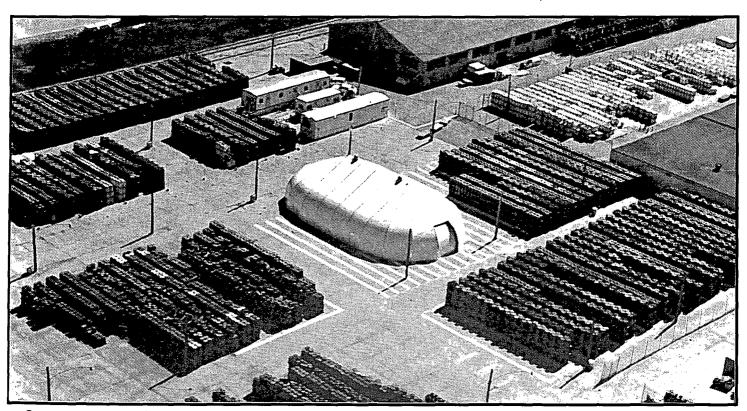
\$165 million in 1990



The Fernald Site is located about 20 miles northwest of Cincinnati, Ohio.

Many of the environmental, safety, and health regulations that are now applicable to the Fernald Environmental Management Project did not exist in the 1950s and 1960s, when the plant was in full production. It was not until the early 1970s that environmental consciousness was raised on a national scale, with particular focus on the environmental effects of the industrial revolution. The Department of Energy is committed to environmental restoration and sound waste management practices at all of its facilities. Hence, the Fernald Environmental Management Project's highest priority is ensuring compliance with federal and state environmental regulations.

To address the releases and threats of releases of hazardous substances from containers and facilities, the Department of Energy and the U.S. EPA entered into a Consent Agreement in 1990 under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). As part of CERCLA, a comprehensive Remedial Investigation/Feasibility Study (RI/FS) is being conducted at the Fernald Environmental Management Project in conjunction with the U.S. EPA and the Ohio EPA to identify appropriate remedial actions. This process involves thorough site characterization, evaluation of cleanup alternatives, public review and comment, and selection of preferred final remedial actions. Environmental restoration efforts under the RI/FS have been divided into five Operable Units, addressing specific areas or facilities at the site.



Covered storage structures such as the one pictured above are being used to provide safe, indoor storage for drummed waste pending final disposition of the material.

Operable Unit 1 (the waste storage area) includes Waste Pits 1-6, the Burn Pit and the Clearwell. Operable Unit 2 (the other waste units) includes the sanitary landfill, lime sludge ponds, inactive fly ash disposal area, active fly ash pile, and the Southfield Area. Operable Unit 3 (the former production area) includes the 136-acre production area and several other suspect areas such as the scrap metal piles, fire training area, and the site effluent line to the Great Miami River. Operable Unit 4 (the silos) includes K-65 silos 1 and 2 which contain radium-bearing wastes, Silo 3 which contains dried uranium-bearing wastes, and Silo 4 which is empty. Operable Unit 5 (environmental media) includes groundwater, surface water, soil, sediments, air, flora and fauna throughout the Fernald Environmental Management Project and surrounding areas.

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Waste materials at the Fernald Environmental Management Project are stored in six waste pits, three silos, and thousands of 55-gallon drums. The treatment, storage, and disposal of hazardous waste must be consistent with the Resource Conservation and Recovery Act of 1976 (RCRA) and its subsequent amendments. Characterization and analysis of all waste material at Fernald is necessary in order to determine the precise nature, quantity, and location of each kind of waste, and how each should be handled under RCRA. Thousands of manhours of RCRA and Occupational Safety & Health Administration (OSHA) training have been completed and this training continues to support such activities as sampling of suspect RCRA materials, overpacking deteriorated drums to prevent escape of radioactive and hazardous materials into the environment, and proper storage and handling of RCRA regulated waste.

## Waste Management

Waste material regulated under RCRA requires stringent storage and handling methods. Under the Fernald Site's RCRA Implementation Plan, configured hazardous waste accumulation areas have been established at several locations throughout the facility, and procedures have been established for regular and frequent inspections. Newly constructed warehouses have been placed into service incorporating security, emergency response equipment, and environmental protection capabilities. Several existing buildings also have been refurbished to allow safe storage of hazardous materials.

Low-level radioactive waste is being shipped off site for disposal. Much of the shipped waste is slightly contaminated construction rubble that has been generated as part of the cleanup and restoration effort.

Idle production buildings at the Fernald Environmental Management Project are being used as indoor storage facilities for radioactive waste pending final disposition. Prior to being moved indoors for storage, all waste drums are inspected and repackaged as necessary to minimize drum deterioration and leakage.



Drummed Waste being inspected as it is loaded onto a truck for off-site shipment.

## **Emergency Preparedness**

An Emergency Operations Center (EOC) and a mobile communications unit are located on site to coordinate response efforts in the event of an incident that would pose a potential threat to public health and safety. A Joint Public Information Center (JPIC) located in nearby Fairfield, Ohio, also provides a telecommunications network that is linked to Civil Defense departments in Hamilton and Butler counties, along with various other state, county, and local public safety agencies, to coordinate emergency communications and disseminate important information to the media.

Fernalds emergency warning system has been upgraded for the purpose of warning local residents of approaching severe weather with a potential to produce a tornado. Eleven Department of Energy warning sirens are located within a two-mile radius of Fernald. This system is activated by the National Weather Service at the Greater Cincinnati Airport, as part of the Hamilton County Civil Defense Outdoor Warning System.

#### For More Information

Meeting the information needs of the public is a high priority at the Fernald Environmental Management Project. Questions and requests for information about the facility and its environmental and waste management programs, emergency preparedness, and the site's role in the community are all welcomed.

Information about the Fernald Environmental Management Project is available at reading rooms located in the Cincinnati Public Library (downtown) and the Harrison Public Library which contain detailed reports, documents, and other material related to the ongoing cleanup effort. The Administrative Record, a compilation of documents related to the CERCLA cleanup effort at the site, is available for public viewing in the JAMTEK building located at 10845 Hamilton-Cleves Highway in Crosby Township.

Top management, and a Speakers' Bureau comprised of site personnel with various backgrounds and fields of expertise, are available to make presentations for interested groups and organizations upon request. Anyone who wishes to request these public services should call (513) 738-6934 or write to:

Fernald Environmental Management Project Community Relations Department Westinghouse Environmental Management Company of Ohio P.O. Box 398704 Cincinnati, Ohio 45239-8704.

